REMARKS

Claims 44-46 and 48-58 were pending in this application. Claims 55 and 57 have been amended to clarify claim language. No claims have been added or canceled. As such, claims 44-46 and 48-58 are still pending. Such amendments do not narrow the scope of the claims, introduce new matter, or require further search or consideration. Entry of the present amendment, and reconsideration of the application as amended is respectfully requested.

(1) Allowable Subject Matter

The Examiner is thanked for the indication that claims 44-46 and 48-54 are allowed.

(2) Claim Rejections, 35 U.S.C. § 102(b)

Claims 55-58 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Schirra *et al.*, *J. Clin. Invest.* (hereinafter "Schirra"). This rejection is respectfully traversed for at least the reasons which follow.

It is well established that to anticipate a claim, a reference must disclose every element of the claim. *Verdegaal Bros. v. Union Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989). Applicants submit that cited prior art fails to disclose each and every element of the present claims, and therefore does not anticipate the claimed invention.

In rejecting the claims at issue, the final Office Action asserts that the claimed methods are anticipated by the teachings of Schirra. The final Office Action alleges that Schirra teaches the administration of exendin to reduce the risk of a cardiovascular or cerebrovascular event "for the reasons of record." In support of the rejection, the previous office action alleged that Schirra discloses "the administration of exendin(9-39)amide which is a peptide receptor antagonist of GLP-1 in humans, wherein the exendin(9-39)NH_2 increased plasma glucagons [sic] levels during euglycemia and hyperglycemia." The previous office action then asserted that Schirra discloses "the administration of exendin at a dose effective amount to normalize blood glucose" and continued, alleging that "the administration of exendin at a dose effective amount to normalize blood glucose [. . .] will inherently reduce the risk of cardiovascular or cerebrovascular events." *Office Action mailed June 5, 2006*, page 3

Initially, the present independent claims are directed to methods for reducing a risk of cardiovascular event or a cerebrovascular event. As discussed in the previous response, Schirra is silent with regard to the use of exendins and exendin agonist analogs in such methods. Rather, Schirra discuses the efficacy of exendin(9-39)amide, an exendin analog antagonist, on various functions of GLP-1. Schirra found that exendin(9-39)amide increase plasma glucagon levels during euglycemia and hyperglycemia, and had no effect of plasma levels of insulin during euglycemia, but decreased plasma insulin during hyperglycemia. Overall, Schirra found that exendin(9-39)amide is a potent GLP-1 antagonist without any agonistic properties. However, there is no direct evidence in Schirra that exendin(9-39)amide, as a GLP-1 antagonist, functions to "normalize blood glucose." Rather, the experiments are generally in relation to its effects on GLP-1 and related physiological parameters. In this regard, there is no direct evidence that potent GLP-1 antagonists are inherently capable of functioning in the methods claimed in the present application.

Moreover, it is noted that the claims are directed to specific methods of use not recognized in the cited prior art, rather than compositions of matter possessing an inherent property or functional activity. Again, the present claims require a method for reducing a risk of cardiovascular event or a cerebrovascular event. The Federal Circuit has directly addressed this issue of claim interpretation, and held that "the claims' recitation of a patient or a human 'in need' gives life and meaning to the preambles' statement of purpose. [. . .] The preamble is therefore not merely a statement of effect that may or may not be desired or appreciated. Rather, it is a statement of the intentional purpose for which the method must be performed." *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333 (Fed. Cir. 2003) (*citations omitted*).

In interpreting a claim directed to a "method of treating macrocytic-megaloblastic anemia in… a human in need thereof," the Federal Circuit held that the claim preamble is a limiting "statement of intentional purpose." *Jansen v. Rexall Sundown,* 342 F.3d at 1333. The Court explained that "administering the claimed vitamins in the claimed doses for some purpose other than treating or preventing macrocytic-megaloblastic anemia is not practicing the claimed method." "[T]he combination of folic acid and vitamin B[12] must be administered to a human with a recognized need to treat or prevent macrocytic-megaloblastic anemia." *Jansen v. Rexall Sundown,* 342 F.3d at 1334.

In accordance with proper claim interpretation, the present claims require a method comprising the administration of an exendin or an exendin agonist analog for the intended purpose of reducing a risk of a risk of cardiovascular event or a cerebrovascular event in an individual with a recognized need for reducing such a risk. The mere disclosure in Schirra of experiments to elucidate the efficacy of exendin(9-39)amide as an antagonist of GLP-1 does not amount to a teaching or suggestion of such methods.

In sum, nothing in Schirra teaches or suggests a method of reducing a risk of cardiovascular event or a cerebrovascular event, or individual in need of reducing such a risk. Moreover, the exendin(9-39)amide disclosed in Schirra is not an exendin, nor is it an exendin agonist analog, as understood by those of skill in the art or as recognized in the present specification. For example, the specification discloses several sequences of exendins, including exendin-3, exendin-4, helospectin, and helodermin. The specification also discloses exemplary exendin analogs, including exendin-4(9-39), described as an exendin analog with antagonist activity, and Q^8,Q^9 helodermin. As such, exendin(9-39)amide, while being an exendin analog, is in fact, an exendin antagonist analog.

As such, Schirra does not teach each and every element of the present claims. Withdrawal of this rejection is therefore respectfully requested.

(3) Claim Rejections, 35 U.S.C. § 112, First Paragraph, Written Description

Claims 55-58 also stand rejected under 35 U.S.C. 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way so as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the Office Action alleges that the claim term "an exendin agonist analog" lacks description in the specification. This rejection is respectfully traversed for at least the reasons which follow.

The Patent Office "has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the specification the invention defined in the claims." *Ex parte Sorenson,* 3 U.S.P.Q. 2d 1462, 1463 (B.P.A.I., 1987). In this regard, in order to meet the written description requirement, the applicant must "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." *Ex parte Anderson*, 21 U.S.P.Q. 2d, 1241, 1249 (B.P.A.I., 1991). In addition, the subject matter

of the claims need not be described literally (*i.e.*, using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement. *See* MPEP § 2163.02.

As previously stated, support for the present claim terminology may be found, e.g., in the specification at page 6, line 29 through page 7, line 2; page 7, lines 15-26; and page 8, lines 7-12. Additional support may be found, *e.g.*, page 8, lines 10-12; pages 10-11 and Table 1. More particularly, the specification describes compounds which include GLP-1 peptides and "related peptides" that are agonists of, *i.e.*, activate, the GLP-1 receptor molecule and its second messenger activity on, *inter alia*, insulin producing β-cells (*i.e.*, molecules that activate the GLP-receptor). *See* page 7, lines 15-26 and page 6, line 31. As examples of GLP-1 "related peptides," a table is provided which lists exendins and "exendin analogs" (*e.g.*, exendin(9-39)amide is described as an "exendin analog" and a potent antagonist of GLP-1 receptors on page 8, lines 10-12). *See* Table 1, page 10.

Taken as a whole and in light of such description, it is submitted that one of skill in the art would understand the inventors to be in possession of "exendin agonist analogs." Withdrawal of this rejection is therefore respectfully requested.

CONCLUSION

In view of the above, each of the presently pending claims is believed to be in immediate condition for allowance. Accordingly, the Office is respectfully requested to withdraw the outstanding rejections of the claims, and to pass this application to issue. The Office is encouraged to contact the undersigned at (303) 863-2303 should any additional information be necessary for allowance.

Respectfully submitted,

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